

## TOPICS IN REVIEW

## The poor physical health of people with mental illness

Results of most research on the physical health of people with mental illness suggests the morbidity and the mortality from certain physical conditions is high in people with long-term mental illnesses. In this review, I examine the physical health of psychiatric patients, especially those with schizophrenia or depression and some possible explanations for any inequities in their health status. I also discuss the health care that psychiatric patients receive, both in terms of recognition of physical illness and subsequent intervention, with particular reference to cardiovascular disease. Finally, I review potential barriers to effective care and methods for overcoming these.

## METHODS

I based the review on a MEDLINE search from 1966 to June 2001 limited to articles in English. I used the following search terms: *mental disorder, schizophrenia, depression, mortality, morbidity, health status, cardiovascular diseases, myocardial infarction, diet, smoking, exercise, mass screening, mammography, cervical cancer*. Because the literature on this topic was extensive, I hand searched the reference lists of key review articles in this field from 1990 onward.

## MORTALITY RATES IN PSYCHIATRIC PATIENTS

"All cause" mortality is higher in psychiatric populations when compared with the general public or with other comparison patient groups. Much of this mortality relates to death from 'unnatural causes,' namely suicides and accidents. The standardized mortality ratios for natural deaths, however, are also raised in many psychiatric populations. Several authors have reviewed this excess mortality in the past decade.<sup>1-3</sup> Huge changes have occurred in the field of psychiatry in this same time period, including the move toward community care for patients with severe mental illnesses, the availability of less toxic antidepressant and antipsychotic medications, and greater involvement of primary care physicians in the health of people with schizophrenia and other chronic psychiatric illnesses. Studies from an era when patients were confined to a mental health institution and overmedicated may not be directly applicable to modern patients.

In one of the most comprehensive reviews of this muddy field, Harris and Barraclough scrutinized 152 reports regarding mortality in psychiatric illnesses.<sup>3</sup> Analysis of standardized mortality ratios for deaths from natural causes showed an increased risk of death in patients with

## Summary points

- Psychiatric patients experience increased morbidity and mortality associated with a range of physical conditions
- Cardiovascular disease is associated with both schizophrenia and depression
- Depression is a strong predictor of future myocardial infarction and of poor prognosis after infarction
- Lifestyle, psychotropic medication, and inadequate physical health care all contribute to the poor physical health of people with mental illness
- Physicians must be aware that primary and secondary health prevention is often neglected in patients with mental illness
- Programs to improve the physical health of psychiatric patients are essential and have been shown to be effective

a wide range of psychiatric conditions, including substance misuse, schizophrenia, mental retardation, bipolar affective disorder, and unipolar depression (see box below). Patients with schizophrenia appear to have increased risks of deaths from circulatory conditions and from infectious and endocrine disorders. Interestingly, despite reported high rates of smoking in patients with chronic psychoses, rates of cancer do not appear to be raised.<sup>2-4</sup>

The established link between depressive symptoms and increased mortality has attracted much attention. Studies

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Heroin and other drug misuse increases the likelihood of physical illness in people with mental illness

#### Diagnostic groups with raised mortality from natural causes

- Substance misuse (drugs and alcohol)
- Mental retardation
- Eating disorders
- Schizophrenia and other psychoses
- Affective disorders including depression

have become increasingly rigorous, controlling carefully for other known risk factors for increased mortality. Even with careful control for such confounders, the link between depression and early death remains strong.<sup>5</sup> Depression confers a 24% increased risk of dying within the next 6 years. Depression is thus coined, one of the “least understood lethal exposures” deserving intensive research effort in the next quarter century.<sup>6</sup>

#### PHYSICAL MORBIDITY RATES

Because psychiatric patients are more likely to die of natural causes, the obvious correlate is that they have more physical health problems than the general population. Physical health is inextricably linked to mental health, and physical illness may cause psychiatric symptoms. At the very least, physical illness is likely to exacerbate psychiatric symptoms, such as anxiety and depression, in patients with mental health problems. Therefore, assessment and management of physical health in this population are essential.

Findings of studies show that people with schizophrenia have higher rates of cardiovascular disease, including myocardial infarction, than the general population.<sup>7,8</sup> An even stronger association exists between cardiovascular morbidity and depressive illness. Although it is clear that patients are more at risk for depression after myocardial infarction, depression itself increases the risk of infarction<sup>9</sup> and is a predictor of poor prognosis after the event.<sup>10</sup> It remains to be seen whether adequate treatment of depression can successfully prevent cardiovascular morbidity and improve postinfarct prognosis.

#### CAUSES OF POOR PHYSICAL HEALTH IN PSYCHIATRIC PATIENTS

##### Lifestyle risk factors

Patients with psychoses, including schizophrenia, are more likely than the general population to have lifestyle risk factors for cardiovascular disease and mortality.<sup>11,12</sup> They are more likely to smoke than the general population,<sup>2,11,12</sup> even when lower socioeconomic class populations are used for comparison.<sup>12</sup> The costs associated with tobacco use also render them economically poorer, with

further consequences for their physical health.<sup>13</sup> Theories for the increased smoking rates in people with schizophrenia include a therapeutic effect of nicotine on psychotic symptoms and a propensity for smoking to increase the metabolism of antipsychotic drugs, thus reducing the side effects of their use.<sup>2</sup>

Increased rates of smoking are also seen among patients with depression, although the direction of causality is difficult to ascertain.<sup>14</sup> Do smokers become depressed or do depressed people smoke more? Some evidence suggests that nicotine addiction and depression may even share some genetic and neurochemical predisposition.<sup>14</sup> Whatever the direction of causality, the clinical reality is that depressed people inhale more smoke than the general population, which exposes them to a host of tobacco-related illnesses.

Patients with chronic psychoses are less likely to exercise<sup>12</sup> and more likely to have diets higher in fat and lower in fiber than the general population. The picture is less clear when considering obesity and alcohol use in this patient group. Some studies have shown that rates of obesity and alcohol misuse are the same in patients with chronic psychosis as in the general population,<sup>11,12</sup> although others conclude a proven association exists between schizophrenia and alcohol and drug misuse.<sup>2</sup>

Depressive symptoms—such as low energy, poor appetite, and weight loss—are intimately related to the cardiovascular risk factors of lack of exercise, obesity, and poor diet. Analyzing the role of these cardiovascular risk factors in depressed people may not be valuable because these factors are part of the depressive syndrome. Some researchers, however, have considered the role that diet may play in depression, including speculation about the contributory effects of a low intake of dietary fish oils.<sup>15</sup> This putative link between diet and depression, suggested from ecologic evidence, requires further exploration.

Randomized controlled trials have examined exercise as a form of treatment for depression. The methodology of these trials has been criticized, however, and the relationship between exercise and depression remains uncertain.<sup>16</sup>

#### Medication

Psychotropic medication is associated with a host of physical complications and side effects, the discussion of which is beyond the scope of this review. It is always important to remember that such medications are often responsible for iatrogenic physical health problems. Antipsychotic medication in particular may induce endocrinologic (eg, galactorrhea), neurologic (eg, tardive dyskinesia), and cardiovascular (eg, lengthening of the QT interval) side effects.<sup>2</sup> New antipsychotic agents are a momentous move away from more toxic medications but carry their own potential for worsening physical health. In particular, their

increased propensity to cause weight gain may jeopardize both physical health and patient compliance.<sup>17</sup>

## BARRIERS TO RECEIVING ADEQUATE PHYSICAL CARE

Evidence shows that psychiatrists and family physicians are poor at recognizing and treating physical conditions in psychiatric patients.<sup>1,11,18,19</sup> Several explanations have been suggested. Because physical complaints may occur as part of a psychiatric illness, some physicians might neglect physical assessment in their psychiatric patients, wrongly assuming that their symptoms are psychological. Alternatively, the psychiatric symptoms may render patients less able<sup>1</sup> or less likely<sup>2</sup> to communicate their physical needs. Attending physicians may be uncomfortable dealing with patients with psychiatric problems, which might impair their clinical assessment. The stigma of mental illness may be another hurdle that prevents patients from receiving the correct treatment.<sup>19</sup> In the United States, many people with mental disorders report difficulty in obtaining insurance. Therefore, cost is the barrier that prevents them from obtaining the right medical care when it is needed.<sup>20</sup>

When cardiovascular risk factors are recorded in the medical notes of patients with chronic psychiatric illness, often little is done to intervene and improve their risk profiles.<sup>11</sup> Few researchers have studied whether psychiatric patients are offered general screening measures, such as mammography and cervical smears, as often as the general population. However, when secondary prevention after myocardial infarction is examined, individuals with mental disorders are less likely to receive appropriate physical care than their mentally healthy peers.<sup>21,22</sup> In a group of patients older than 65 years, those with mental disorders were less likely to undergo coronary angioplasty or a coronary artery bypass procedure after myocardial infarction than their mentally healthy peers.<sup>21</sup> A subsequent independent analysis demonstrated similar results in patients aged 65 years or younger after an acute myocardial infarction.<sup>22</sup>

## WHAT CAN BE DONE?

The poor physical health of psychiatric patients must begin to receive the clinical attention that it deserves. Despite numerous calls to take their physical health seriously, psychiatric patients still suffer excess morbidity and mortality from physical causes, and they receive inferior physical health care.

Patients with psychiatric conditions are as likely to have a primary care physician as the general population,<sup>20</sup> and experts generally agree that this physician should provide the physical health care. Most patients with psychotic illnesses are in frequent contact with primary care professionals,<sup>23</sup> offering ample opportunity for assessment and

promotion of physical health. Those vocal in the field advocate a more coordinated and proactive approach to the problem.<sup>1,2,19</sup> Effecting this change requires education of both patients and clinicians regarding the unmet health needs in this population. Incentives for identifying physical problems in people with chronic psychiatric illness in primary care are needed so that appropriate interventions may be delivered.<sup>19</sup> Perhaps primary care physicians, or general practitioners in the United Kingdom, should be rewarded financially for identifying and treating physical health problems in psychiatric patients. The use of standardized assessments has been suggested,<sup>2</sup> as has the development of better models of primary care psychiatry that address patients' physical needs.<sup>1</sup> Evidence suggests that patients with depression and those with psychotic illnesses deserve more intense evaluation and treatment of cardiovascular risk factors and disease.

These recommendations are achievable. Evidence regarding smoking, one of the most resistant areas of health promotion, suggests that interventions to reduce tobacco use in psychiatric patients can be successful. Both group treatments<sup>24</sup> and combinations of group treatments, nicotine replacement therapy, and prescription of atypical antipsychotic agents<sup>25</sup> have shown some efficacy in smoking cessation in psychiatric patients. Good physical health status is a realistic goal in people with mental illness, and this goal should be embraced by all health professionals who provide their care.

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